

Sheldon H.D. Lee

Chemical Engineer
Argonne National Laboratory
9700 South Cass Avenue, Bldg. 205
Argonne, IL 60439
phone: 630/252-4395
fax: 630/972-4442
e-mail: lee@cmt.anl.gov

Professional Experience

- Engineering design and installation, laboratory setup and testing, and data analysis for FASTER (Feasibility of Acceptable Start-Time Experimental Reformer) test facility
- Design, fabrication, and installation of integrated methane reformer system based on Argonne autothermal reforming technology
- Design, fabrication, installation, and testing of engineering-scale integrated fuel-flexible fuel processor based on catalytic autothermal reforming
- Development of a regenerable sorption process to remove carbon monoxide from reformat fuel gas for polymer electrolyte fuel cells in transportation applications
- Testing of the partial oxidation reformer to develop reforming catalysts for hydrocarbon fuels and determine engineering parameters needed for scale-up
- Coal combustion studies (volatility of trace elements in coal and alkali emissions from coal combustion)
- Development of process to remove gaseous alkali metal compounds from hot pressurized fluidized-bed combustion flue gas

Professional Society Activities

- American Chemical Society
- Honor Society of Phi Kappa Phi
- Fuel Chemistry Division of American Chemical Society

Awards

- Argonne Quality and Safety Recognition Award 2004
- Pacesetter Award 1997

Publications

- 1 patent

Education

- PhD, Fuels Engineering, University of Utah
- BS, Metallurgical Engineering, Cheng Kung University, Taiwan